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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/067,266 | 02/07/2002 | Toshio Morita | Q63212 | 6691 |

23373 7590 07/11/2005
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WASHINGTON, DC 20037

EXAMINER

GRAY, JILL M

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| ART UNIT | PAPER NUMBER |
|----------|--------------|

1774

DATE MAILED: 07/11/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/067,266

Applicant(s)

MORITA ET AL.

Examiner

Jill M. Gray

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 March 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3,5-11,13-16,18,20 and 21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3,5-11,13-16,18,20 and 21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

DETAILED ACTION

Response to Amendment

The rejection of claims 6 and 8-10 under 35 U.S.C. 102(e) as being anticipated by Masuko et al, 6,780,388 B2 is moot in view of applicants' amendment.

Prior art reference Masuko et al, 6,780,388 B2 is withdrawn in view of applicants' statement of common ownership.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title; if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 3, 5, 11, 13-16, 18 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over PCT Publication WO 00/58536 (Nishimura et al, English equivalent 6, 489,026 B1, and hereinafter referred to as Nishimura) for reason of record.

Response to Arguments

Applicant's arguments filed March 29, 2005 have been fully considered but they are not persuasive. Applicants argue that Nishimura discloses a number of different boron compounds, among which is boron nitride but does not contain a specific example of the use of boron nitride and does not disclose or suggest that a coating of an electrically insulating material of boron nitride is formed, and thus, the disclosure of boron nitride in Nishimura does not satisfy the recitation in the present claims of a partial or entire coating of an electrical insulating material of boron nitride.

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This is not found to be persuasive because Nishimura teaches the vapor grown carbon fibers (vgcf) having a diameter within the range contemplated by applicants, said vgcF having a boron concentration within the range set forth by applicants and produced in a manner substantially similar to applicants'. Accordingly, in the absence of factual evidence of record, the examiner has reason to believe that some of the boron nitride would be located on the surface of the vgcF, as required by claims 1, 11 and 16. It is noted that the boron nitride of the present invention is an "electrically insulating material". However, boron nitride is known as being both insulative and conductive. Thus, there is no clear factual evidence on this record that the vgcF with boron nitride of the prior art does not result in some degree of insulative properties. Also, it should be noted that the vgcF having the requisite resistivity of claims 1, 11 and 16 is not necessarily limited to or specified as vgcF with boron content or vgcF with a boron nitride coating.

Applicants argue that the only inert gas disclosed by Nishimura is Ar and that in the case of an Ar inert gas atmosphere, B forms a compound only with carbon, and O or N in the boron compound is diluted with the Ar gas and does not remain as vgcF or as a boron compound, thus, Nishimura does not disclose or suggest a coating of an electrical insulating material of boron nitride.

In this regard, claims 1, 3, 5, 11, 13-16, 18, and 20 are drawn to the product and not the method of making, hence, arguments with respect to the process of making are not germane. Furthermore, there is no clear factual evidence of record that clearly substantiates applicants' allegation. As set forth previously, the examiner has reason to believe that some boron nitride is

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present on the fiber surface and, the requirement of “wherein the surface thereof is partially or entirely coated” includes nominal amounts of coating.

Allowable Subject Matter

1. Claims 7-10 and 21 are allowable over the prior art currently of record.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jill Gray whose telephone number is (571) 272-1524. The examiner can normally be reached on Monday-Thursday from 10:30 to 7:00 alternate Fridays.

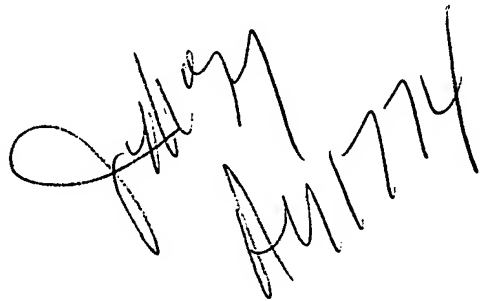
If attempts to reach the examiner by telephone are unsuccessful, the examiner’s supervisor, Rena Dye can be reached on 571-272-3186. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

J. M. Gray/af

June 28, 2005

A handwritten signature, likely of J. M. Gray, is written in black ink. Below the signature, the text "Art Unit 1774" is also handwritten in black ink.